

PARTNERS IN THE
**Science in Space
Challenge**



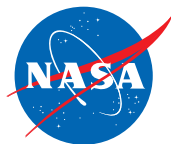
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Blast Off in 5 Easy Steps!

Design a science and technology investigation for a NASA Astronaut to perform on a future space mission.

- 1.** Discover how to launch your science and technology investigation.
Learn all about the challenge!
- 2.** Learn the rules of the Science in Space Challenge.
Refer to the Investigation Proposal Guidelines and NASA Requirements and Guidelines to teach your students how to design and conduct a creative science and technology investigation in space.
- 3.** Engage your class and create your science and technology investigation.
Brainstorm with your students using the Liftoff to Learning Resource Guides and the Space Experiment Modules.
- 4.** Select and design your science and technology investigation.
Review the Official Challenge Rules and write your Investigation Proposal.
- 5.** Submit your science and technology Investigation Proposal.
Enter the Challenge via e-mail, fax, or regular mail.
All entries must be received or postmarked by June 3, 2005.



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Step 1

Discover how to launch your science and technology investigation.

Put your students' ideas into orbit! Design a science and technology investigation for a NASA Astronaut to perform on a future space mission.

Challenge Overview

- The Science in Space Challenge is sponsored jointly by NASA and Pearson Scott Foresman.
- All K–12 teachers are eligible to enter. One entry from grades K–6 and one entry from grades 7–12 will be selected.
- To enter, teachers must submit a detailed written proposal, describing an innovative and interesting science and technology investigation that their students have designed to be performed in space. To assist teachers and students in creating a science and technology investigation, the Investigation Proposal Guidelines, NASA Requirements and Guidelines, and a link to the Liftoff to Learning Resource Guides and the Space Experiment Modules are provided.

Judging and Criteria

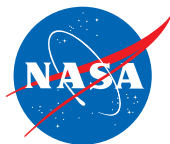
- A distinguished panel of key NASA science leaders will evaluate and select two entries, one for grades K–6 and one for grades 7–12, based on uniqueness of concept, compliance with NASA guidelines, possibility of successful outcome, and educational impact or value.

Prizes and Recognition

- A NASA Astronaut will conduct the selected investigations on a future space mission. As the Astronaut performs the investigations from space, students can follow along on Earth via television or the Internet and compare their results. The investigations also could be published in a future Scott Foresman Science textbook.
- NASA and Pearson Scott Foresman will co-announce the selected entries in September 2005. The selected classroom teachers and their school principals will be awarded an expense-paid trip to Orlando, Florida, to watch a Space Shuttle launch in 2006 as recognition for their achievement.

Dates and Deadlines

- Challenge begins September 14, 2004.
- Deadline for entries is June 3, 2005.
- Selections will be announced on or before September 6, 2005.



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Step 2

Learn the rules of the Science in Space Challenge.

Teach your students how to design a creative science and technology investigation to be conducted on a future space mission using the Investigation Proposal Guidelines and a list of NASA Requirements and Guidelines.

Investigation Proposal Guidelines K–6 7–12

NASA Investigation Requirements and Guidelines

Materials

The following are general guidelines that NASA uses in selecting materials that are safe for human space flight. This is not an inclusive list, but should be used as a guide when designing an investigation.

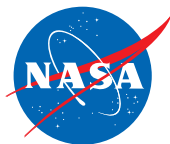
- No electrical power, no liquids, and no glass
- Materials should be substantial enough to withstand the force of the launch
- Avoid materials that would produce “off gassing,” for example rubber cement or other toxic products
- Avoid sharp edges
- Avoid materials with tiny particles that would be difficult to contain in microgravity
- Materials should be items commonly found in classrooms or homes

Time and Size Constraints

- Your investigation should not exceed three hours in total length
- Investigation steps must be able to be broken down into no more than three time blocks of one hour or less
- Space needed to store and conduct your investigation should not exceed these dimensions: 8-5/8” (H) X 16-1/8” (W) X 9-1/8” (L)

Other Considerations

- Your investigation should offer a high possibility of success—it can actually be done.
- Your investigation should be innovative.
- Your investigation should have educational value or impact and tie in with your state standards.
- Your investigation should be clear, easy to follow, and designed in 100 percent compliance with all NASA Requirements and Guidelines provided.



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Step 3

Engage your class and create your science and technology investigation.

Brainstorm science and technology investigation concepts with your students using the Liftoff to Learning Resource Guides and Space Experiment Modules.

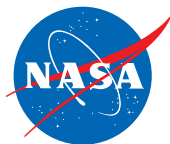
Liftoff to Learning Resource Guides

To view previous science and technology investigations conducted in space, click on <http://quest.nasa.gov/space/teachers/liftoff/>.

- Guide 1 Microgravity
- Guide 2 From Undersea to Outer Space
- Guide 3 Geography From Space
- Guide 4 Mathematics of Space—Rendezvous
- Guide 5 Newton in Space
- Guide 6 Tethered Satellite Parts 1 & 2
- Guide 7 Toys in Space 2
- Guide 8 The Atmosphere Below
- Guide 9 Space Basics
- Guide 10 Voyage of the Endeavor—Then and Now
- Guide 11 Assignment: Spacelab!
- Guide 12 Let's Talk Robotics
- Guide 13 Living in Space
- Guide 14 Go For EVA
- Guide 15 All Systems Go!

Space Experiment Modules

To view science and technology experiments that were conducted in space, click on <http://sspp.gsfc.nasa.gov/sem/about.html>.



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Step 4

Select and design your science and technology investigation.

Choose the best investigation idea generated by your students and then write your Investigation Proposal. Be sure to follow the Official Challenge Rules!

Official Rules

NASA and Pearson Scott Foresman Science in Space Challenge

- **No purchase necessary.** Open to all teachers in grades K–12 and their respective classrooms.
- Important: Please read these Official Rules carefully before entering the Science in Space Challenge (the “Challenge”).
- The Science in Space Challenge is a process whereby K–12 teachers, on behalf of their students, submit proposals for a science and technology investigation to be conducted on a future space mission (the “Investigation Proposal”). By submitting an Investigation Proposal, all entrants agree to be bound by these Official Rules.

1. How to Enter

- You (on behalf of your students) may enter by going online at www.scottforesman.com and downloading and printing the Investigation Proposal Guidelines to write your Investigation Proposal. Once completed, you may submit your proposal in one of three ways:
 - (i) E-mail as an attachment to: senior_national_science_consultant@scottforesman.com
 - (ii) Fax to: Senior National Science Consultant/Science in Space Challenge, 847-486-3660
 - (iii) Send via U.S. Mail to:
Senior National Science Consultant
Pearson Scott Foresman, D-1707
1900 E. Lake Ave.
Glenview, IL 60025
- Any Investigation Proposal submitted must conform to the guidelines, as further specified in the Challenge forms, in order to be eligible for the Challenge. Limit one entry per teacher or per classroom. All entries, entry forms, and Investigation Proposals become the property of PEARSON SCOTT FORESMAN. By submitting an entry, you agree that PEARSON SCOTT FORESMAN shall have the right (but not the obligation) to publish any Investigation Proposal in its textbooks and in associated publishing material.

2. Eligibility

- Open to legal U.S. residents who are Kindergarten through Grade 12 teachers as of September 14, 2004. To be eligible, entries must be completed and received by PEARSON SCOTT FORESMAN in the format designated. Employees of NASA and PEARSON SCOTT FORESMAN and any of its affiliate companies, subsidiaries, agents, professional advisors, advertising and promotional agencies, and immediate families of each are not eligible to enter.

3. Disclaimer

- PEARSON SCOTT FORESMAN, all participating sponsors, and any of their respective parent companies, subsidiaries, affiliates, directors, officers, professional advisors, employees, and agencies will not be responsible for (1) any late, lost, incomplete, misrouted, misdirected, postage-due, or damaged entries or errors in transmission; (2) any Challenge disruptions, injuries, losses, or damages caused by events beyond the control of PEARSON SCOTT FORESMAN; or (3) any printing or typographical errors in any materials associated with the Challenge.
- PEARSON SCOTT FORESMAN and its agencies are not responsible for technical, hardware, software, or telephone malfunctions of any kind and shall not be liable for failed, incorrect, incomplete, inaccurate, garbled, or delayed electronic communications utilized in this Challenge, which may limit the ability to participate in the Challenge. If for any reason (including infection by computer virus, bugs, tampering, unauthorized intervention, fraud, technical failures, or any other cause beyond the control of PEARSON SCOTT FORESMAN, which corrupts or affects the administration, security, fairness, integrity, or proper conduct of this Challenge), the Challenge is not capable of being conducted as described in these rules, PEARSON SCOTT FORESMAN shall have the right, at its sole discretion, to modify and/or cancel the Challenge.
- Electronic entries must include a valid e-mail address for the entrant. In the event of a dispute as to identity or eligibility based on an e-mail address, the selected entry will be declared made by the "Authorized Account Holder" of the e-mail address submitted at the time of the entry. "Authorized Account Holder" is defined as the natural person who is assigned to an e-mail address by an Internet access provider, online service provider, or other organization (e.g., business, educational institution, etc.) that is responsible for assigning e-mail addresses for the domain associated with the submitted e-mail address.

4. Challenge Period

- All e-mailed or faxed entries must be received on or after September 14, 2004 and by June 3, 2005, 8:00 p.m. EST (the "Deadline"). All mail-in entries must be postmarked by the Deadline and received by June 10, 2005 to be eligible to win the prize.

5. Prizes

- On or about September 6, 2005, one teacher from grades K–6 and one teacher from grades 7–12 (on behalf of his/her respective students) will be selected to have their Investigation Proposals conducted on an upcoming space mission. In addition, the submitting teachers and their respective school principals shall receive an expense-paid trip to Orlando, Florida, to watch a Space Shuttle launch in 2006 (airfare and hotel accommodations for the grades 7–12 teacher and principal to be provided by NASA, with an approximate value of \$2,500, and airfare and hotel accommodations for the grades K–6 teacher and principal to be provided by PEARSON SCOTT FORESMAN, with an approximate value of \$2,500). Trip consists of roundtrip coach-class air transportation, from major airport nearest to their residences, for two people (teacher and principal) to Orlando, Florida, and one night's hotel accommodations. Selected teachers and their principals must take trip during the date of the Space Shuttle launch or the prize is forfeited. Selected teachers and principals are solely responsible for all federal, state, and local taxes on prize and for any and all meals, transportation between residences and major commercial airport of departure, ground transportation, gratuities, upgrades, personal incidentals, and any other expenses not specified herein. Travel is subject to availability and other restrictions and blackout dates may apply. ALL FEDERAL, STATE, AND LOCAL TAXES ASSOCIATED WITH THE RECEIPT OR USE OF ANY PRIZES ARE THE SOLE RESPONSIBILITY OF THE SELECTED TEACHERS AND THEIR PRINCIPALS.
- The selected teachers will be notified in writing by e-mail or by U.S. mail shortly after the selection of their Investigation Proposals. If a grand prize is not claimed within 7 days after notification of prize award, it will be forfeited and awarded to an alternate teacher. Any prize awarded hereunder is not transferable. No substitutions or exchanges (including for cash) of any prizes will be permitted, except that PEARSON SCOTT FORESMAN reserves the right to substitute a prize of equal or greater value for any prize that becomes unavailable, including but not limited to the delay of the launch of the Space Shuttle. All prizes are awarded "AS IS" and WITHOUT WARRANTY OF ANY KIND, express or implied (including, without limitation, any implied warranty of merchantability or fitness for a particular purpose).

6. Selection Process

- The selected Investigation Proposals will be determined in a two-step process. First, PEARSON SCOTT FORESMAN will review all eligible entries submitted by the Deadline. PEARSON SCOTT FORESMAN will select the top ten (10) eligible entries for grades K–6 and the top ten (10) eligible entries for grades 7–12 on or about June 17, 2005, using selection criteria provided by NASA. Entries will be evaluated based on uniqueness of concept, compliance with NASA Requirements and Guidelines, possibility of successful outcome, and educational impact or value. The ten top submissions for each grade-level category will then be forwarded to a distinguished panel of key NASA science leaders, with the final selection to be determined on or about July 22, 2005. The selected entries will be announced in September 2005. In the event an insufficient number of entries are received that are qualified for judging, PEARSON SCOTT FORESMAN reserves the right to cancel the Challenge and shall be under no obligation to award the prizes.

7. General Release

- By entering the Challenge, all entrants release PEARSON SCOTT FORESMAN, participating sponsors, and any of their respective parent companies, subsidiaries, affiliates, directors, officers, employees, and agencies (collectively, the "Released Parties") from any liability whatsoever, and waive any and all causes of action for any claims, costs, injuries, losses, or damages of any kind arising out of or in connection with the Challenge or resulting from acceptance, possession, or use or misuse of any prize, including, without limitation, personal injuries, death, property damage, and claims based on publicity rights, defamation, invasion of privacy, portrayal in a false light, copyright infringement, patent infringement, trademark infringement, and merchandise delivery.

8. Ownership of Entries

- By submitting an Investigation Proposal, irrespective of whether they are the winning entry, entrants acknowledge and agree that they disavow any and all proprietary rights (including but not limited to copyright) in their submitted Investigation Proposal and that such Investigation Proposals shall be deemed public domain materials and that the Investigation Proposals themselves and the resulting images and data will be publicly available for use by anyone without further permission. Additionally, all submitted Investigation Proposals will not be acknowledged or returned. Entrants agree to execute any and all documents requested to effectuate the disavowal of rights described in this paragraph. Entrants hereby irrevocably and unconditionally waive any and all moral rights or any rights of similar nature under any law in any jurisdiction in and to any and all elements of the Investigation Proposals. Entrants represent and warrant to PEARSON SCOTT FORESMAN and NASA that (i) any Investigation Proposals submitted are the original creation of entrant, or entrant's students; (ii) the use of such Investigation Proposals as contemplated in these rules will not violate the rights of any third party; and (iii) entrant has obtained all rights necessary from the creators of the Investigation Proposals (including but not limited to releases from students, students' parents or legal guardians, or any other third parties) in order to grant these rights.

9. Use of Selected Teachers' Information

- Except where prohibited by law, acceptance of a prize constitutes permission to use the selected teacher's name, picture or likeness, school and school district name, state of residence, and prize information, without limitation, for promotional purposes, without further permission or compensation.

10. Rules Request

- To obtain a copy of these rules, send a stamped, self-addressed business-size envelope to PEARSON SCOTT FORESMAN at the address listed below, Attn: Senior National Science Consultant/Science in Space Challenge Rules Request.

11. Copyright Notice

- The Challenge and all accompanying materials are copyright © 2004 by PEARSON EDUCATION, INC., publishing as PEARSON SCOTT FORESMAN.

12. Miscellaneous

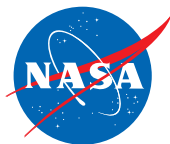
- The Challenge will be governed, construed, and interpreted under the laws of the United States. By participating in the Challenge, entrants agree (i) to be bound by these Official Rules and by the decisions of PEARSON SCOTT FORESMAN, which are final and binding in all respects, and (ii) to the use of the information supplied by entrant by PEARSON SCOTT FORESMAN; its subsidiaries and affiliates within Pearson Education, Inc.; and certain Web sites affiliated with PEARSON SCOTT FORESMAN, for marketing and advertising purposes. PEARSON SCOTT FORESMAN reserves the right to suspend or cancel the Challenge or any entrant's participation in the Challenge should any cause beyond PEARSON SCOTT FORESMAN's control affect the administration, security, or proper play of the Challenge. Entrants who violate these Official Rules, tamper with the operation of the Challenge, or engage in any conduct that is detrimental to PEARSON SCOTT FORESMAN, the Challenge, or any other entrant (as determined by PEARSON SCOTT FORESMAN's sole discretion) are subject to disqualification. Each selected teacher will be required to sign an affidavit of eligibility and publicity/liability release that must be returned within fifteen (15) days of notification attempt or prize may be awarded to an alternate. Travel companions also will be required to sign and return a release prior to ticketing. PEARSON SCOTT FORESMAN reserves the right to reject entry forms from persons whose eligibility is in question or who have been disqualified or are otherwise ineligible to enter the Challenge. If you have any questions about these Official Rules or the Challenge, please send written questions to PEARSON SCOTT FORESMAN at 1900 East Lake Street, Glenview, IL 60025, Attn: Senior National Science Consultant.

13. Selected Teachers' Names

- To obtain the names of the selected teachers and principals after September 6, 2005, send a self-addressed, stamped envelope to PEARSON SCOTT FORESMAN at 1900 East Lake Avenue, Glenview, IL 60025, Attn: Senior National Science Consultant/Science in Space Challenge Results Request.

14. Challenge Sponsors

- The sponsors of the Challenge are PEARSON SCOTT FORESMAN, a division of Pearson Education, Inc., located at 1900 East Lake Avenue, Glenview, IL 60025, and National Aeronautics and Space Administration (NASA).



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Step 5

Submit your science and technology Investigation Proposal.

All entries must be postmarked by June 3, 2005 and received by June 10, 2005.

Send Us Your Investigation Proposal

By e-mail (send as an attachment):

senior_national_science_consultant@scottforesman.com

By fax:

Attn: Senior National Science Consultant/Science in Space Challenge, 847-486-3660

By regular mail*:

Attn: Senior National Science Consultant/Science in Space Challenge
Pearson Scott Foresman, D-1707
1900 East Lake Avenue
Glenview, IL 60025

*Mailed entries must be postmarked on or before June 3, 2005 and received by June 10, 2005.